

Summary List of Questions asked from Stakeholders during the Framework Document Workshop for Residential Furnace/Boiler Standards (7/17/01)

Market Assessment: Information Sources

1. Should the Department consider additional data sources for market assessment?
2. Are the stakeholders willing to provide more detailed information?

Market Assessment: Specific Topics

3. Should the Department consider regional differences in product distribution or use. If so, which ones?
4. What assumptions regarding the impact of non-regulatory initiatives (e.g. Energy Star, utility rebates) should DOE use in the analysis?
5. Are there any impending changes in the traditional 3-step distribution chain of which the Department should be aware?

Product Classes: Proposed Classes

6. Separate classes of furnaces and boilers can be established in order to accommodate differences in product efficiency and to preserve consumer utility. Are the Department's selected classes appropriate?
7. Could some classes be consolidated for analytical purposes?

Baseline Models: Overview

8. Based on the market assessment and input from GAMA, the Department has suggested using a set of characteristics to define baseline furnaces and boilers. Are these features appropriate? Should other features be added?
9. Are multiple baseline units needed within a class?
10. Should the Department define baseline products for other classes or is it possible to extrapolate the results to those classes?
11. Since, for a given input rating, rated output will increase as efficiency increases, should we just allow the output to increase or should we adjust the input capacity downward to maintain constant output?

Baseline Models: Product Capacity (Input Rating)

12. Residential boilers range higher in input rating than do furnaces. Why is this so?
13. Should the baseline capacity change over time due to trends toward larger homes or toward "tighter" building envelopes.

Baseline Models: Furnace Efficiency

14. Most of the furnace models on the market have an efficiency of 80% AFUE or higher. Why does the market prefer 80% over 78%?
15. What design differences exist between those two levels?

Screening Analysis: Technologies

16. Are there specific technologies that should or should not be considered for residential furnaces and boilers?

Engineering Analysis: Proposed Approach

17. Based on past approaches such as the Design Option and Efficiency Level approach, we propose to combine data sources for this rulemaking, consisting of steps described in the framework document. Based on their advantages and disadvantages, are all these steps necessary, or are others warranted?
18. What role should manufacturers and other stakeholders have in providing data and reviewing assumptions, methods and results?
19. How many teardowns should be conducted? Of which models?
20. What simulation models or engineering estimates should be used?
21. If we draw on multiple sources of information, what guidelines should we use for reconciling them and integrating them into a single set of cost-efficiency data?

Electricity Consumption: Approach

22. Current standards for residential furnaces and boilers are based on the AFUE only. What are the potential benefits and drawbacks of supplementing it with an electricity consumption indicator in this rulemaking?
23. What is the most appropriate method to regulate this electricity use.
24. What are the best approaches to address the cooling-side impacts.

Life Cycle Cost Analysis: Approach

25. Are the proposed approaches reasonable?
26. Should regional variations in climate and energy price be analyzed in ANOPR stage or later (NOPR)?
27. Are the proposed data sources reasonable?
28. Should equipment lifetimes depend on operating hours, climate, or other application-specific variables? Should lifetimes be the same for all product classes of furnaces? Of boilers?

Consumer Subgroup Analysis: Approach

29. In addition to the general population, impacts on two subgroups have been analyzed previously: low income households (life cycle cost impacts) and elderly households (e.g., lower usage affected LCC of clothes washer standards). What subgroups should be considered for residential furnaces and boilers?

National Energy Saving and Net Present Value Analysis: Approach

30. What other approaches should the Department consider to establish the forecasts for base case and standards cases?
31. What are the best information sources for past shipment data by efficiency level?
32. What existing non-regulatory initiatives should be considered in the base case?

Manufacturer Impact Analysis: Approach

33. What impacts will standards have on...
 - Industry cash flows and net present value?
 - Product flow through distribution channels?
 - Manufacturing capacity?
 - Industry employment levels?
 - Competition?
34. What products or subgroups may be particularly sensitive to impacts of new standards?
35. What other regulations contribute to a cumulative regulatory burden on manufacturers, and what is their combined impact?
36. Should the Department consider other topics beside competition, employment, capacity utilization and cumulative burden?

Employment Impact Analysis: Approach

37. What methods should be used to estimate employment impacts?

Utility Impact Analysis: Approach

38. Should we consider using alternative methods to NEMS for conducting the utility impacts analysis?

Environmental Analysis: Approach

39. Are there any other environmental factors the Department should consider?
40. If so, what additional analytical methods are appropriate for addressing them?